What is claimed is:

1. A method for determining a maximum number of attempted retry operations when a read error occurs in an optical disk device, the method comprising the steps of:

receiving an RF signal from a pickup of the optical disk device;

detecting an envelope of the RF signal;

asserting a defect signal when a level of the envelope is lower than a predetermined threshold;

generating interrupt pulses during the assertion of the defect signal; and

determining the maximum number of attempted retry operations according to the interrupt pulses.

2. The method as claimed in claim 1, wherein the interrupt pulses are periodically generated at a predetermined time interval during the assertion of the defect signal.

3. The method as claimed in claim 2, wherein the maximum number of attempted retry operations is determined according to a total number of the interrupt pulses within a read period of a data block causing the read error.

4. The method as claimed in claim 3, wherein one of a first, second and third values is selected as the maximum respectively when the total number of the interrupt pulses is larger than a first threshold, between the first and second threshold, and lower than the second threshold.

5. The method as claimed in claim 4, wherein the first threshold is larger than the second threshold, the first value is smaller than the second value and the second value is smaller than the third value.

6. The method as claimed in claim 1, wherein the interrupt pulses are generated only upon level transitions in the defect signal.

7. The method as claimed in claim 6, wherein the maximum of times the retry operation is attempted is determined according to a total length of periods between pairs of odd and even-numbered pulses, within a read period of a data block causing the read error.

8. The method as claimed in claim 7, wherein one of a first, second and third values is selected as the maximum respectively when the total length of the periods is larger than a first threshold, between the first and second threshold, and lower than the second threshold.

9. The method as claimed in claim 8, wherein the first threshold is larger than the second threshold, the first value is smaller than the second value and the second value is smaller than the third value.

10. An apparatus for determining a maximum number of attempted retry operations when a read error occurs in an optical disk device, the apparatus comprising:

an RF signal processor for both receiving and amplifying an RF signal from a pickup of the optical disk device;

an envelope detector for outputting an envelope of the RF signal according to the results of the RF signal processor;

an defect detector for both asserting a defect signal when a level of the envelope is lower than a predetermined threshold and for generating interrupt pulses during the assertion of the defect signal, wherein the defect detector receives the output of the envelop detector; and

a system controller for determining the maximum number of attempted retry operations according to the interrupt pulses, wherein the system controller receives the output of the defect detector.

11. The apparatus as claimed in claim 10, wherein the interrupt pulses are periodically generated at a predetermined time interval during the assertion of the defect signal and are received by the defect detector.

12. The apparatus as claimed in claim 11, wherein the system controller determine the maximum number of attempted retry operations according to a total number of the interrupt pulses within a read period of a data block causing the read error.

13. The apparatus as claimed in claim 12, wherein one of a first, second and third values is selected as the maximum respectively when the total number of the interrupt

pulses is larger than a first threshold, between the first and second threshold, and lower than the second threshold.

14. The apparatus as claimed in claim 13, wherein the first threshold is larger than the second threshold, the first value is smaller than the second value and the second value is smaller than the third value.

15. The apparatus as claimed in claim 10, wherein the interrupt pulses are generated only upon level transitions of the defect signal.

16. The apparatus as claimed in claim 15, wherein the system controller determines the maximum of times the retry operation is attempted according to a total length of periods between pairs of odd and even-numbered pulses, within a read period of a data block causing the read error.

17. The apparatus as claimed in claim 16, wherein one of a first, second and third values is selected as the maximum respectively when the total length of the periods is larger than a first threshold, between the first and second threshold, and lower than the second threshold.

18. The method as claimed in claim 17, wherein the first threshold is larger than the second threshold, the first value is smaller than the second value and the second value is smaller than the third value.